Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1. (withdrawn) A method for producing a vaccine containing an immunogenic determinant, comprising the steps of:
- a) exposing extra-cellular pathogenic organisms to stress-inducing stimuli which would induce the production of stress protein/antigenic peptide fragment complexes;
 - b) extracting the endogenous stress-induced products from the treated cells; and
 - c) using the extracted products as the immunogenic determinant in the preparation of the vaccine composition.
- 2. (withdrawn) The method as claimed in claim 1, wherein the active ingredient of the immunogenic determinant predominantly comprises one or more shock protein/antigenic peptide fragment complexes.
- 3. (withdrawn) The method as claimed in claim 1, wherein the stress-inducing stimulus is heat.
- 4. (withdrawn) The method as claimed in claim 3, wherein the pathogenic organism is heated to from 5 to 8°C above the normal temperature for cultivation of the organism.
- 5. (withdrawn) The method as claimed in claim 1, wherein the pathogenic organism is an extra-cellular procaryotic or protozoan species.
- 6. (withdrawn) The method as claimed in claim 1, wherein the pathogenic organism is a bacterial, protozoal or fungal species.

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- 7. (withdrawn) The method as claimed in claim 1, wherein the immunogenic determinant is a mixture of heat shock protein/antigenic peptide fragment complexes.
- 8. (withdrawn) The method as claimed in claim 1, wherein the extra-cellular pathogenic organism has been modified to induce or enhance the induction of the synthesis of stress proteins.
- 9. (withdrawn) The method as claimed in claim 1, wherein the method is carried out in vitro.
- 10. (currently amended) A vaccine composition comprising an immunogenic determinant, wherein the immunogenic determinant comprises one or more complexes between a stress induced heat shock protein and an antigenic peptide fragment wherein said complex or complexes are obtained from the heat treatment of an extra-cellular a pathogenic organism selected from the group consisting of bacteria, protozoa and fungi.
- 11. (currently amended) A vaccine composition produced by the method comprising the steps of:

exposing a pathogenic organism selected from the group consisting of bacteria, protozoa and fungi to extra-cellular pathogenic organisms to stress-inducing stimuli heat shock which results in would induce the production of stress heat shock protein/antigenic peptide fragment complexes by said organism;

extracting the endogenous stress induced products complexes from said organism to provide a vaccine composition comprising said extracted complexes. the treated cells; and using the extracted products as the immunogenic determinant in the preparation of the vaccine composition.

12. (currently amended) A <u>The</u> vaccine composition as claimed in claim 10, wherein the composition comprises an adjuvant for the <u>one or more complexes</u> immunogenic determinant.

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- 13. (previously presented) The vaccine composition as claimed in claim 10, which is an aqueous composition wherein the composition comprises an aqueous carrier.
- 14. (currently amended) A method for treating vaccinating an animal with a vaccine directed to an extracellular pathogenic organism against infection by a pathogenic organism selected from the group consisting of bacteria, protozoa and fungi comprising administering a pharmaceutically acceptable quantity of a vaccine composition as claimed in claim 10 sufficient to elicit an immune response in the animal to said pathogenic organism.
- 15. (withdrawn) A method for eliciting an immune response from an animal to infection by an intra-cellular pathogenic organism the method comprising:

administering a vaccine containing an immunogenic determinant, the immunogenic determinant being a stress protein/antigenic peptide fragment complex produced in situ from the intra-cellular pathogen, the synthesis of the complex being induced by external stress stimuli or by genetic modification of the pathogen so as to render its synthesis constitutive.

- 16. (new) The vaccine composition according to claim 10, wherein said complex or complexes are obtained from the heat treatment of a bacteria.
- 17. (new) The vaccine composition according to claim 11, wherein said complexes are obtained by exposing bacteria to heat shock.
- 18. (new) The method according to claim 14, wherein the animal is vaccinated against infection by a bacteria.

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